

MATERIAL SAFETY DATA SHEET

Rec 2-10-87

1/30/87

ISSUE DATE:

To the Purchaser: This MSDS contains important environmental, safety and health information for your employees who will be using this product. Please be sure this information is given to them. If you resell this product, a copy of the MSDS should be given to the buyer.

MANUFACTURER'S NAME Ferro Corporation/Composites Division	PHONE NO: Emergency (216)641-8580 Ext. 6320
ADDRESS (Number, Street, City, State, & Zip Code) 5915 Rodeo Road, Los Angeles, CA 90016	

Dms 2055 Peric

SECTION I

TRADE NAME CPH-2207/Woven Glass	DOT CLASS/ID NUMBER NA
CHEMICAL & COMMON NAME(S) Phenolic Resin Mixture	FORMULA Trade Secret

SECTION II

OSHA POTENTIAL HAZARDOUS INGREDIENT(S)		% (Optional)	EXPOSURE LIMITS		
COMPONENT	CAS#		ACGIH-TLV	OSHA PEL	(Other) Cal/OSHA-PEL
Phenolic Resin Mixture			None Established.		
Phenol (< 5%)	108-95-2	32-55	5 ppm	5 ppm	5 ppm
Formaldehyde (< 0.5%)	50-00-0		1 ppm	3 ppm	2 ppm
Acetone	67-64-1		750 ppm	1,000 ppm	750 ppm
Fiber Glass	65997-17-3	45-68	10 mg/M ³	NF	5 mg/M ³ *

ADDITIONAL INFORMATION
 *Nuisance Particulates < 1% Quartz, Respirable Dust

HMIS Label Information; Health 2 (Skin), Flammability: 1, Reactivity: 0,

Personal Protection: B.

SECTION III PHYSICAL DATA

BOILING POINT (°F) Resin will cure before boiling	NA	SPECIFIC GRAVITY (H₂O=1)	~ 1.4
VAPOR PRESSURE (mm Hg) @ 25°C	< 1	VOLATILES BY VOLUME (%) 10min. @ 325°F	3-9
VAPOR DENSITY (AIR =1)	> 1	EVAPORATION RATE (BUTYL ACETATE=1)	< 1
SOLUBILITY IN WATER	Negligible	MELTING POINT (°F)	NA

APPEARANCE & ODOR: Woven fiber amber to black color, at ambient temperature, a light formaldehyde odor.

SECTION IV FIRE & EXPLOSION HAZARD DATA

FLASH POINT (Method Used) Uncured material, open cup > 350°F	FLAMMABLE LIMITS	LEL NA	UEL NA
EXTINGUISHING MEDIA CO ₂ , Dry chemical chemical, foam, water fog.			
SPECIAL FIRE FIGHTING PROCEDURES Combustion will give off toxic products. Use self-contained breathing apparatus.			
UNUSUAL FIRE & EXPLOSION HAZARDS (See Reactivity Section for other physical hazards) Airborne dusts produced from grinding or cutting of the cured prepreg resin may ignite if exposed to an ignition source. Keep this work away from sources of ignition. Ground equipment to prevent static electricity.			

NA = NOT APPLICABLE

NF = NOT FOUND

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SECTION V REACTIVITY DATA

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TRADE NAME		SECTION V REACTIVITY DATA		ISSUE DATE	PAGE 2
STABILITY	UNSTABLE		CONDITIONS TO AVOID		
	STABLE	X	See "Incompatibility" Section below.		
INCOMPATIBILITY (Materials to Avoid)					
Strong Acids or Alkalies, Strong Oxidizing Agents					
HAZARDOUS DECOMPOSITION PRODUCTS					
Phenols, Aldehydes, Carbon Monoxide, Cyanide					
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID		
	WILL NOT OCCUR	X	None expected		

SECTION VI HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY	
Skin Primary, Inhalation Secondary	
LISTED AS A CARCINOGEN? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, explain: Formaldehyde (gas) tested positive by inhalation exposure in rats. Levels of exposure that caused nasal tumors also caused acute degeneration, tissue death and inflammation in the nasal cavity. Listed by National Toxicology Program. (D.H.H.S.) Annual Report on Carcinogens.	
SYMPTOMS AND EFFECTS OF OVEREXPOSURE Dust and vapor are mild pulmonary and eye irritants. Long term breathing of dust from machining the material can damage the lungs. The uncured material may act as a sensitizer. Pre-existing skin allergies may place a worker at increased risk of developing allergic dermatitis from repeated contact. Repeated exposure to dust, or the vapors from heated uncured resin, where there is poor ventilation may cause asthmatic sensitization in some people. Pre-existing eye disorders may be aggravated by dust or vapor from this product. Ingestion of material is considered to have a low order of acute toxicity. Formaldehyde (gas) air contaminant at 2 or 3ppm, exposure to humans results in very mild tingling sensation in the eyes, nose and throat. At 4 to 5ppm the discomfort increases rapidly and tearing of the eyes may occur. Substance has good irritant warning properties.	
EMERGENCY AND FIRST AID PROCEDURES Respiratory irritations and headaches: Person should be removed to fresh air and referred to a physician. Eye contact: must be flushed immediately with large quantities of water; medical attention should be obtained without delay. Ingestion: dilute with milk or water, induce vomiting, call a physician. Skin irritation: remove person from the causative source, thoroughly wash with soap and water after contact. If irritation persists for several days, seek medical treatment from a physician competent in industrial health.	

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Normal procedures for solid trash; only cured material should be allowed with general trash.
WASTE DISPOSAL METHOD
Non-hazardous cured resin material should be disposed of in accordance with state and local solid waste regulations.

SECTION VIII RECOMMENDED CONTROL MEASURES

RESPIRATORY PROTECTION		
Above the TLV: NIOSH approved for pneumoconiosis producing dusts and organic vapors.		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	
	"C" stage grinding and sawing or using heat guns on "B" stage.	
	For lay-up, machining and curing rooms.	
PROTECTIVE GLOVES	Polyolefin or Neoprene Type or No "Tack" 8-stage solvent repellent skin creme	EYE PROTECTION
		Goggles for dust protection in machining operation.
OTHER PROTECTIVE EQUIPMENT		
Long sleeve shirts and pants recommended be worn for lay-up and machining operations. Wear clean clothes daily; resin contaminated clothes could promote dermatitis.		
SPECIAL PROTECTIVE MEASURES FOR REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT		
Review MSDS prior to preparing equipment for maintenance-repair.		

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING (Including appropriate hygienic practices)
Store the uncured prepreg at 40°F or less. Keep the uncured material away from sources of ignition. Wash hands before eating, smoking, or applying cosmetics.
DO NOT STORE FOOD IN WORK AREAS!

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